

IN THE SPECIFICATION:

On page 1, after the title, insert the following heading:

BACKGROUND OF THE INVENTION

On page 3, after line 20, please insert the following heading:

SUMMARY OF THE INVENTION

On page 4, delete lines 4 and 5 as follows:

~~This task is solved by a device per Patent Claim 1.~~

~~Advantageous embodiments are given in the Dependent Claims.~~

On page 4, delete lines 11 and 12 as follows:

~~This task is solved by a device per Patent Claim 7.~~

~~Advantageous embodiments are given in the Dependent Claims.~~

On page 4, delete lines 16-18 as follows:

~~This further task is solved by means of electronic throttle control system devices per Claims 23 and 25. Dependent Claims refer to advantageous embodiments of the invention.~~

On page 4, lines 1-3 to page 5, lines 1-9, please amend the paragraph to read as follows:

For the achievement of the first objective ~~per Patent Claim 1~~ with an electronic throttle control system device with twist-throttle control element (e.g., a twist grip) and a rotation-position sensor (preferably an inductive or Hall-effect rotation sensor), in which the rotation-position sensor is positioned outside the rotational axis of the twist-throttle control element, and whose rotor unit is coupled with the twist-throttle control element via the first teeth of an engaging element and the second teeth of a toothed element, a return element is so coupled with the rotor unit that the engagement between the first and second teeth occurs essentially without play.

On page 8, lines 7-19, please amend the paragraph to read as follows:

In the achievement of the second objective ~~based on the invention per Claim 7~~, the rotation-position sensor is positioned axially adjacent to the twist-throttle control element, whereby the rotation axis of the rotor unit is essentially identical with the rotation axis of the twist-throttle control element. Based on the invention it is recommended that the rotation-position sensor be configured as an intermediary coupling unit between the twist-throttle control element and the rotor unit. The intermediary coupling unit is firmly connected both with the twist-throttle control element and with the rotor unit. The coupling, however, is so shaped that any occurring oblique loads are not transferred.

On page 10, delete lines 3-5 and page 11, lines 6-23 to page 7, lines 1 and 2, please amend the paragraph to read as follows:

~~In the following, expanded embodiments of the invention will be provided that may be used for electronic throttle control system device based on either Patent Claim 1 or 7.~~

A In an expanded embodiment of the invention, a return element may advantageously be formed using a spring-loaded pull cable attached to a cable guide element that is essentially ring-shaped. The cable guide element is coupled with the rotor unit or with the twist-throttle control element so that it may not rotate. The cable guide element includes at least one wedge-shaped cross-section cable guide slot into which the cable is inserted. When the twist-throttle control element is actuated, the cable is placed into the cable guide slot. The wedge shape allows achievement of a desired degree of friction of the pull cable. This may be increased by the use of a friction-increasing insert in the slot. The corresponding friction force may be felt by the user upon actuation of the twist-throttle control element, and is shown in the Force/Path characteristic curve as hysteresis. Suitable adjustment of this friction force, preferably supported by suitable selection of spring characteristic curve and suitable radial extension of the cable guide slot, allows very flexible adjustment of the desired Force/Path characteristic curve.

On page 11, lines 19-22, to page 12, lines 1-12, please amend the paragraph to read as follows:

In a advantageously specially-shaped Hall-effect rotation sensor element, the stator units are shaped as part of a ring. A first stator ring element extends within an angular range of from 100° to 140°, and a second stator ring element within an angular range of from 220° to 260°. The angle values expressed as length here designate the width of the angle range (as a portion of a 360° full circle) over which the elements extend. Such a sensor is especially suited for the determination of a rotation angle between 0° and 120°, as is required on a twist grip. It is further advantageous for the magnetic element to be formed as a partial ring magnet segment element, and include a length of from about 100° to 150°. Details of a general Hall-effect rotation sensor that is not specially adapted for use as a rotation-position sensor in a throttle-control system based on the invention may be taken from DE-A-19716985 ~~by the Applicant~~ which is incorporated herein by reference.

On page 12, lines 13-23 to page 13, lines 1-3, please
amend the paragraph to read as follows:

The alternatively preferred inductive rotation sensor includes an inductive coupling element on the rotor unit, and an inductor circuit with at least two inductors on the stator unit. The inductive coupling of the two inductors is dependent on the position of the coupling elements. It is again preferred that the inductor circuit is shaped as a portion of a ring encompassing an angle range of between 100 and 140° of a full circle. An inductive coupling element with a resonance circuit with at least one inductor and one capacitor is especially preferred. Details regarding such a sensor are described in WO-A-2003038379, which is incorporated herein by reference. The linear position sensor shown here is turned into a rotation sensor by a ring-shaped, or partial-ring-shaped, induction circuit.

On page 12, lines 1-14, please amend the paragraph to read as follows:

In the achievement of the third objective according to the invention ~~based on the invention and described in Patent~~

~~Claim 23~~, independent of whether the rotation-position sensor is positioned in the rotation axis of the twist-throttle control element or at a distance from it, a Hall-effect rotation sensor is provided as was described above. A first stator ring element is 100 to 140° long, and a second stator ring element is 220 to 260°. The rotor unit preferably includes a partial-ring-shaped magnet segment element of a length of from 100 to 150° that is positioned on a magnet mounting element.

On page 12, lines 18-22, to page 13, lines 1-3, please amend the paragraph to read as follows:

In further achievement of the third objective, ~~based on the invention per Claim 25~~, again independent of rotation-position sensor position, a special inductive sensor is provided. It is specially adapted for use on a throttle twist grip, and offers a high degree of accuracy and resolution in the pertinent angle range. For this, the induction circuit is partial-ring-shaped, and it extends over an angle range of 100 - 140°.

On page 14, delete lines 4-6, and insert the following paragraph and heading:

~~In the following, embodiment examples of the invention are described in greater detail using Illustrations, which show:~~

For a full understanding of the present invention, reference should now be made to the following detailed description of the preferred embodiments of the invention as illustrated in the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS;

On page 14, amend lines 7-19 to read as follows:

Figure 1 A is a schematic perspective view of a general electronic throttle control system for motorcycles in a
~~schematic, perspective view;~~

Figure 2 ~~The~~ is a schematic cutaway view of the general electronic throttle control system in Figure 1 in a
~~schematic cutaway view;~~

Figure 3 Parts is a perspective view of parts of a first embodiment ~~example~~ of an electronic throttle control system ~~in perspective view;~~.

Figure 4 A is a perspective view of a sensor unit of the throttle control system in Figure 3 ~~in perspective view;~~.

Figure 5 Parts is a perspective exploded view of parts of the sensor unit in Figure 4 ~~in a perspective exploded view;~~.

Figure 6 Parts is a perspective exploded view of parts of a stator unit of an inductive sensor of the sensor unit in Figures 4, 5 ~~in a perspective exploded view;~~.

On page 15, please amend lines 1-20 to read as follows:

Figure 6a Stator is a perspective view of stator elements of the stator unit in Figure 6 ~~in perspective view;~~.

Figure 6b A is a perspective view of a rotor unit of the inductive sensor in Figure 5 ~~in perspective view;~~.

Figure 7 A is a perspective view of a second embodiment ~~example~~ of a sensor unit with inductive sensor in ~~perspective view;~~.

Figure 7a An is an inductive coupling element of the inductive sensor in Figure 7~~;~~.

Figure 7b An is an inductive circuit of the inductive sensor in Figure 7~~;~~.

Figure 8a A is a frontal perspective view of a third embodiment ~~example~~ of a sensor unit~~;~~.

Figure 8b A is a rear perspective view of the sensor unit in Figure 8a~~;~~.

Figure 9 An is a perspective view of an opened sensor unit in Figure 8 ~~in perspective view;~~.

Figure 10 The is an exploded perspective view of the sensor unit in Figure 8a, 8b ~~in an exploded perspective view;~~.

Figure 11 ~~View of a cross-section~~ is a cross-sectional view through a fourth ~~third~~ embodiment ~~example~~ of a sensor unit with pull cable spring~~;~~.

On page 16, please amend lines 1-7 to read as follows:

Figure 12 A is a longitudinal cross-section of the sensor unit in Figure 11~~;~~.

Figure 12a A is a cross-sectional view along projection A...A'
in Figure 12.

Figure Figures 13a-13d Various are various initial
characteristic curves of a rotation-position sensor.

Figure 14 A is a perspective view of a return element.

On page 16, after line 7, insert the following heading
and paragraph:

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The preferred embodiments of the present invention will now
be described with reference to Figures 1-14 of the drawings.
Identical elements in the figures are designated with the
same reference numerals.

On page 31, after the last line, insert the following
paragraph:

There has thus been shown and described a novel
electronic throttle control system for motorcycles which
fulfills all the objects and advantages sought therefor.
Many changes, modifications, variations and other uses and
applications of the subject invention will, however, become

apparent to those skilled in the art after considering this
specification and the accompanying drawings which disclose
the preferred embodiments thereof. All such changes,
modifications, variations and other uses and applications
which do not depart from the spirit and scope of the
invention are deemed to be covered by the invention, which
is to be limited only by the claims which follow.